

REMARKS

Claims 17, 45-47, 160 and 194 have been amended for clarity and not for any reason of patentability. No claims have been added or cancelled. Therefore, claims 1-203 remain pending in the application. Reconsideration is respectfully requested in light of the following remarks.

Section 103(a) Rejection:

The Examiner rejected claims 1-44, 48-82, 86-105, 109-143, 147-157 and 160-203 under 35 U.S.C. § 103(a) as being unpatentable over Dutta et al. (U.S. Publication 2002/0073075) (hereinafter “Dutta ‘075”) in view of Borella et al. (U.S. Patent 6,269,099) (hereinafter “Borella”), and claims 45-47, 83-85, 106-108, 144-146, 158 and 159 as being unpatentable over Dutta ‘075 and Morella, and further in view of Dutta et al. (U.S. Publication 2002/0073204) (hereinafter “Dutta /204”). Applicants traverse this rejection for at least the following reasons.

In the Response to Arguments section of the Final Office Action, item A, the Examiner submits that in paragraphs [0037], [0048], and [0081] Dutta discloses a core layer comprising one or more peer-to-peer platform protocols for enabling the plurality of peer nodes to discover each other, communicate with each other, and cooperate with each other to form peer groups and share network resources in the peer-to-peer environment. The Examiner submits that the layer comprising the Gnutella protocol is analogous to Applicants’ core layer, and that the resources of Dutta for searching or executing a query among peer groups is analogous to “sharing network resources”. However, there is nothing in these citations, or elsewhere in Dutta, that teaches or suggests peer groups, or protocols to form peer groups, as recited in Applicants’ claim 1. **The Gnutella protocol does not inherently provide for forming multiple peer groups.** Merely establishing a peer-to-peer connection between two peer nodes, as described in paragraph [0037], does not describe a core layer comprising a peer-to-peer platform protocol for enabling a plurality of peer nodes to cooperate with each other to form multiple peer

groups. Similarly, while paragraph [0048] describes “Ping” and “Pong” messages of Gnutella for discovering other nodes on the network, this citation also does not describe peer groups or a protocol to form multiple peer groups, as recited in claim 1. Finally, paragraph [0081] describes discovering peer nodes at search time by determining the topology of the peer-to-peer network and inviting these nodes to become registered root nodes of the search engine. Again, there is nothing in this citation that teaches or suggests a peer-to-peer protocol for enabling a plurality of peer nodes to cooperate with each other to form multiple peer groups. Instead, it describes only that the search engine can expand its peer-to-peer connections for the purposes of broadening its search capability. Thus, the Examiner’s rejection is completely unsupported by the actual teachings of the cited reference.

Regarding item B of the Response to Arguments section, the Examiner submits that Figure 4 clearly discloses the one or more rendezvous nodes, wherein each rendezvous node is operable to cache one or more resource advertisements for discovery by the peer nodes on the peer-to-peer network. The Examiner submits that the registered root nodes which the server knows ahead of operation (in Dutta) are analogous to the rendezvous nodes of Applicants’ claim 1. The Examiner further submits that each root node caches one or more resource advertisements as the GUID (paragraph [0045]). The Examiner is clearly incorrect. Dutta’s GUID (Globally Unique Identifier) is clearly not a resource advertisement. Instead, it is an identifier of a query message. Paragraph [0045] describes that this GUID is stored by receiving nodes so that if a duplicate query is received, the nodes may safely drop the packet containing the request. Therefore, this citation, and Dutta’s GUIDs, clearly have nothing to do with a rendezvous node caching one or more resource advertisements, as recited in Applicants’ claim 1.

Regarding item C, the Examiner submits that, “paragraph [0045] indicates that the format of GUID is not specifically defined (e.g., lines 3-4). Thus, Dutta discloses the one or more resource advertisements as returned GUID messages are formatted in accordance with the peer-to-peer platform discovery protocol.” However, as discussed above regarding item B, GUIDs have nothing to do with resource advertisements. Therefore,

the formatting of GUIDs, or the lack thereof, cannot teach or suggest anything about the formatting of resource advertisements according to the peer-to-peer platform discovery protocol.

The Examiner has not included any remarks in items B or C regarding further limitations of the rendezvous nodes and resources advertisements of Applicants' claim 1. For example, claim 1 recites, **"wherein each resource advertisement comprises an indication of how to access a corresponding network resource"**. This limitation is clearly not taught or suggested by Dutta's GUIDs, since GUIDs are identifiers of query messages and have nothing to do with resource advertisements, much less with an indication of how to access these resources.

Finally, regarding item D, the Examiner appears to contradict his own remarks (in item C) by stating the following argument in support of his assertion (in item D) that Dutta in view of Borella teaches *one or more resource advertisements are formatted in accordance with the peer-to-peer platform discovery protocol*:

"the previous rejection clearly states the only missing feature from the primary reference is a conventional discovery protocol in the peer-to-peer network wherein the secondary reference discloses the conventional discovery protocol in the peer-to-peer network. Therefore, it is obvious for the primary reference borrows the concept of the conventional discovery protocol in the peer-to-peer network to automatically discovering the peer nodes."

However, as discussed in Applicants' response to the Office Action of September 30, 2005, since Dutta's method does not rely on resource advertisements to identify nodes to each other, applying a discovery protocol to Dutta's method would still not result in the present invention, in which one or more resource advertisements for discovering the peer nodes are formatted in accordance with the peer-to-peer platform discovery protocol.

Furthermore, Applicants note that in the Final Action the Examiner failed to address many of Applicants' arguments. For example, as noted above, the Examiner did not rebut Applicants' argument that the cited art fails to teach or suggest that each resource advertisement cached at a rendezvous node comprises an indication of how to access a corresponding network resource. The GUID of Dutta relied upon by the Examiner clearly has absolutely nothing to do with providing an indication of how to access a corresponding network resource. **Moreover, the Examiner failed to address Applicants' arguments in regard to independent claims 48, 147 and 194.** Applicants request the Examiner to carefully review the following remarks which, in combination with the above remarks, clearly demonstrate that the rejection is unsupported by the cited art.

Regarding the rejection of claim 1, contrary to the Examiner's assertion, Dutta in view of Borella fails to teach or suggest *a core layer comprising one or more peer-to-peer platform protocols for enabling the plurality of peer nodes to discover each other, communicate with each other, and cooperate with each other to form peer groups and share network resources in the peer-to-peer environment.* The Examiner cites Dutta (page 3, paragraphs 0038 and 0040) as teaching this limitation. These paragraphs describe nodes within a peer-to-peer network acting as a distributed file sharing system, in which the nodes act cooperatively to form a distributed search engine, and the use of connection host lists that identify nodes to which each peer node is connected. They do not describe a core layer, including one or more peer-to-peer platform protocols, nor cooperating to form peer groups and share network resources, as discussed above. These limitations are not taught or suggested anywhere in Dutta or Borella, or in the combination thereof.

Further regarding claim 1, Dutta in view of Borella fails to teach or suggest *one or more rendezvous nodes, wherein each rendezvous node is operable to cache one or more resource advertisements for discovery by the peer nodes on the peer-to-peer network.* The Examiner cites Dutta (page 4, paragraph [0045]; page 6, paragraph [0076]; and page 7, paragraph [0082]) as teaching this limitation. The first of these paragraphs describes a

Globally Unique Identifier (GUID), contained in each message. When a node receives a search query, its GUID is compared with a stored list of GUIDs corresponding to search queries previously received by the node. Applicant assumes the Examiner means to equate these GUIDs with the resource advertisements of the present invention. However, as discussed above, GUIDs are not resource advertisements. Furthermore, there is nothing in Dutta that describes these GUIDs being cached by a rendezvous node. Nor does this portion of Dutta describe that the GUIDs are discovered by peer nodes on a peer-to-peer network. The Examiner's second and third citations refer to a registered root node, which Applicants assume the Examiner means to equate with the rendezvous node of the present invention. However, this registered root node is not described as operable to cache resource advertisements for discovery by the peer node on the peer-to-peer network, as recited in claim 1. Instead, Dutta's "root nodes" are described as: "the set of nodes to which a particular node connects" (paragraph [0041]) and a "registered root node" is described as a node which a user has registered as a "root node", e.g., to join a service operator's peer-to-peer network (paragraph [0053]).

Furthermore, Dutta's GUIDs are not described as comprising *an indication of how to access a corresponding network resource*, as recited later in claim 1 regarding resource advertisements. The Examiner cites Dutta (page 5, paragraph [0062]) as teaching this limitation. However, this citation does not describe GUIDs or resource advertisements, but instead describes search hits comprising hyperlinks containing the title of a web page or other file or document matching a search query. These search links are also not described as being cached by a rendezvous node, nor is there anything else in Dutta or Borella, or the combination thereof, that teaches or suggests this limitation of claim 1.

Finally, Dutta in view of Borella fails to teach or suggest *one or more resource advertisements are formatted in accordance with the peer-to-peer platform discovery protocol*. The Examiner cites Dutta (page 3, paragraph [0032]) as teaching *one or more resource advertisements are formatted in accordance with the peer-to-peer platform protocol*, and admits that Dutta fails to teach that the one or more peer-to-peer platform protocols include *a discovery protocol*. However, the Examiner's citation in Dutta

describes a browser for accessing hypertext documents (i.e., content) in a variety of file formats and types of files, not resource advertisements formatted in accordance with a peer-to-peer platform protocol, as recited in claim 1.

The Examiner relies on Borella to disclose *peer-to-peer protocols include a discovery protocol* (column 2, lines 49-57) and states that it would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate Borella's teaching into Dutta's method to use the discovery protocol to identify one another in the peer-to-peer platform in order to enhance performance, reliability and security of data transmitted over the Internet to and from Autonomous Systems or other networks. However, as discussed above, applying a discovery protocol to Dutta's method would not result in the present invention and there is no suggestion in the cited art or elsewhere that applying the teachings of Borella *to Dutta's system* would result in enhanced performance, reliability or security of data transmitted over the Internet.

Applicants remind the Examiner that, "To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)", as stated in MPEP §2142. As discussed above, at least two of these criteria have not been met in the Examiner's rejection of claim 1. First, there is not sufficient motivation shown to combine the teachings of Dutta and Borella. Second, the discovery protocol as disclosed by Borella with the methods of Dutta clearly would not produce the present invention. As discussed in detail above, the prior art references, taken separately or in combination, clearly do not teach all the limitations of claim 1.

Therefore, for at least the reasons above, the rejection of claim 1 is not supported by the cited art and removal thereof is respectfully requested.

Applicants' discussion above regarding claim 1 applies also to independent claim 86, which recites a peer-to-peer network comprising a plurality of peer nodes, one or more rendezvous node, and means for implementing the operations of the peer nodes and rendezvous nodes recited in claim 1; independent claim 109, which recites a method for implementing the operations of the peer nodes and rendezvous nodes recited in claim 1; and independent claim 160, which recites a tangible, computer-accessible medium comprising program instructions computer-executable to implement the operations of the peer nodes and rendezvous nodes recited in claim 1.

Regarding claim 48, contrary to the Examiner's assertion, Dutta in view of Borella fails to teach or suggest *a rendezvous node, comprising a processor, a port operable to couple the peer node to a network, and a memory operable to store program instructions, wherein the program instructions are executable by the processor to communicate with one or more peer nodes on a peer-to-peer network and cache one or more resource advertisements for network resources, wherein each of said resource advertisements comprises an indication of how to access the corresponding network resource, wherein said resource advertisements are discoverable by said one or more peer nodes*. As discussed above regarding claim 1, the Examiner's citations do not teach a rendezvous node, nor do they teach caching one or more resource advertisements for network resources. Dutta in view of Borella also fails to teach or disclose the additional limitations of claim 48, including various components of a rendezvous node, which comprises a processor, a port and a memory operable to store program instructions executable by the processor to implement the operations of the rendezvous node (as discussed above regarding claim 1).

The Examiner rejected independent claim 48 under the same rationale as claim 1. However, the scope of claim 48 differs from that of claim 1. **Since the Examiner failed**

to address the differences between claim 1 and claim 48, the Examiner has failed to state a *prima facie* rejection of claims 48.

For at least the reasons above, the rejection of claim 48 is not supported by the cited art and removal thereof is respectfully requested.

Applicants' discussion above regarding claim 48 applies also to independent claim 147 which recites a method for implementing the operations of a rendezvous node, as recited in claim 48; and to independent claim 194, which recites a tangible, computer-accessible medium comprising program instructions executable to implement the operations of a rendezvous node, as recited in claim 48.

Claims 147 and 194 also include the additional limitation of *one or more peer nodes discovering said resource advertisements*. This additional limitation is not taught by Dutta or Borella, or by the combination thereof. The Examiner rejected independent claims 147 and 194 under the same rationale as claim 1. However, the scope of claims 147 and 194 differs from that of claim 1. Since the Examiner failed to address the differences between claim 1 and claims 147 and 194, the Examiner has failed to state a *prima facie* rejection of claims 147 and 194.

For at least the reasons above, the rejection of claims 147 and 194 are unsupported by the cited art and removal thereof is respectfully requested.

The Examiner also rejected dependent claim 49 under the same rationale as claim 1, but failed to address the specific limitations recited in claim 49. Therefore, no *prima facie* rejection has been stated for this claim.

Moreover, the rejection is further unsupported by the cited art in regard to numerous ones of the dependent claims, some of which are discussed below.

Regarding claim 3, contrary to the Examiner's assertion, Dutta in view of Borella fails to teach or suggest *each resource advertisement comprises an identifier for and communication address for the corresponding network resource*. The Examiner cites paragraph [0062] of Dutta (e.g., URLs) as teaching this limitation. However, as discussed above, this citation does not describe resource advertisements, but instead describes search hits comprising hyperlinks containing the title of a web page or other file or document matching a search query.

For at least the reasons above, the rejection of claim 3 is not supported by the cited art and removal thereof is respectfully requested. Claims 51, 111, and 162 include limitations similar to claim 3, and so the arguments presented above apply with equal force to these claims, as well.

Regarding claim 4, contrary to the Examiner's assertion, Dutta in view of Borella fails to teach or suggest *each of the one or more of said resource advertisements comprises a security credential for authenticating the corresponding network resource*. The Examiner cites Dutta (page 5, paragraph [0055]) as teaching this limitation. However, paragraph [0055] describes only that a Web site operator might require that a registered root node be associated with a person and that a user might supply personal information. This citation has nothing to do with resource advertisements or any security credentials included therein, nor with authenticating a network resource using such a resource advertisement, as recited in claim 4.

For at least the reasons above, the rejection of claim 4 is not supported by the cited art and removal thereof is respectfully requested. Claims 52, 112, and 163 include limitations similar to claim 4, and so the arguments presented above apply with equal force to these claims, as well.

Regarding claim 6, contrary to the Examiner's assertion, Dutta in view of Borella fails to teach or suggest *wherein each peer group comprises one or more of the peer nodes, wherein the resource advertisements include a peer group advertisement for each*

of said one or more peer groups, wherein each peer group advertisement further comprises an identifier for the corresponding peer group and information on how to join the peer group. The Examiner cites Dutta, paragraphs [0081] and [0082] as teaching these limitations, however, these paragraphs describe only that nodes discovered during a search may be invited to join the search engine operator's connection host list. This has nothing to do with peer groups or peer group advertisements, much less any specific limitations of peer group advertisements, as recited in claim 6. As discussed above, a mere list of nodes to which a particular node is connected does not necessarily constitute a peer group, as would be understood by one of ordinary skill in the art, and Dutta does not teach resource advertisements of any kind, much less peer group advertisements.

For at least the reasons above, the rejection of claim 6 is not supported by the cited art and removal thereof is respectfully requested. Claim 54 includes limitations similar to claim 6, and so the arguments presented above apply with equal force to this claim, as well.

Regarding claim 7, contrary to the Examiner's assertion, Dutta in view of Borella fails to teach or suggest *the resource advertisements comprise a peer advertisement for each of said one or more peer nodes, wherein each peer advertisement comprises an identifier for the corresponding peer node.* The Examiner cites Dutta, paragraph [0084] as teaching this limitation. However, this paragraph describes a search-engine-based, peer-to-peer search for content on behalf of a client, in which the server sends a query to each registered node and receives one or more query responses, which include responding node address information. It has nothing to do with resource advertisements containing peer advertisements, as recited in claim 7.

For at least the reasons above, the rejection of claim 7 is not supported by the cited art and removal thereof is respectfully requested. Claim 55 includes limitations similar to claim 7, and so the arguments presented above apply with equal force to this claim, as well.

The Examiner cites Dutta, paragraph [0084] as teaching the limitation of claims 9, 10, 57, and 58, which recite further limitations of resource advertisements, specifically that they include application advertisements (claims 9 and 57) and content advertisements (claims 10 and 58). However, as discussed above regarding claim 7, paragraph [0084] has nothing to do with resource advertisements at all, much less resource advertisements including these specific components. In fact, Dutta in view of Borella fails to teach or suggest resource advertisements at all.

For at least the reasons above, the rejection of claims 9, 10, 57, and 58 is not supported by the cited art and removal thereof is respectfully requested.

Regarding claim 8, contrary to the Examiner's assertion, Dutta in view of Borella fails to teach or suggest *wherein the network resources include one or more services each provided by one or more of the peer nodes, wherein the resource advertisements comprise a service advertisement for each of said plurality of services, wherein each service advertisement comprises an identifier for the corresponding service*. The Examiner cites Dutta, paragraph [0079] as teaching this limitation. However, paragraph [0079] describes compensation transactions for nodes that provide search hits. This has nothing to do with resource advertisements, nor with service advertisements, as recited in claim 8, much less any specific limitations of these advertisements.

For at least the reasons above, the rejection of claim 8 is not supported by the cited art and removal thereof is respectfully requested. Claim 56 includes limitations similar to claim 8, and so the arguments presented above apply with equal force to this claim, as well.

Regarding claim 13, contrary to the Examiner's assertion, Dutta in view of Borella fails to teach or suggest *an advertisement for each of the one or more rendezvous nodes, wherein the advertisement for each of the one or more rendezvous nodes includes information describing how to connect to and communicate with the particular rendezvous node, wherein each rendezvous node is operable to cache one or more of said*

advertisements for the one or more rendezvous nodes, wherein said advertisements for the one or more rendezvous nodes cached on the rendezvous nodes are discoverable by said peer nodes on the peer-to-peer network. The Examiner cites Dutta, paragraphs [0076] and [0082] as teaching these limitations. However, these paragraphs describe only that the load on the server for performing a search is reduced by using registered root nodes and that a registered root node can report the addresses of its connections to the search engine. This clearly does not teach advertisements for rendezvous nodes, nor any of the specific limitations of such advertisements, as recited in claim 13.

For at least the reasons above, the rejection of claim 13 is not supported by the cited art and removal thereof is respectfully requested.

Regarding claim 14, contrary to the Examiner's assertion, Dutta in view of Borella fails to teach or suggest *the one or more resource advertisements each comprise a time-to-live indicator.* The Examiner cites Dutta, paragraph [0045] as teaching this limitation. However, paragraph [0045] describes Dutta's GUIDs and has nothing to do with either resource advertisements or a time-to-live indicator. The only time-to-live indicator described in Dutta is one included in a query message for a content search (see e.g., paragraph [0044]), which is clearly not the same as a resource advertisement.

For at least the reasons above, the rejection of claim 14 is not supported by the cited art and removal thereof is respectfully requested. Claims 63, 88, 114, and 165 include limitations similar to claim 14, and so the arguments presented above apply with equal force to these claims, as well.

Regarding claim 15, contrary to the Examiner's assertion, Dutta in view of Borella fails to teach or suggest *wherein at least a subset of the peer groups comprise: one or more of the rendezvous nodes; and one or more of the plurality of peer nodes; wherein the rendezvous nodes within the peer group are accessible by the one or more peer nodes and the other rendezvous nodes within the peer group to discover network resources within the peer group.* The Examiner cites only FIG. 5C of Dutta as teaching

these limitations, but does not include any remarks indicating which element or elements of FIG. 5C he considers “a subset of the peer groups” comprising the components recited in claim 15. Furthermore, nothing in Dutta describes that the root nodes of Dutta (which the Examiner equates to Applicants’ rendezvous nodes) within a peer group are accessible by other root nodes with the peer group. As discussed above, Dutta does not teach **peer groups** at all, as would be understood by one of ordinary skill in the art and FIG. 5C also does not teach **peer groups**, much less peer groups comprising nodes configured as recited in claim 15.

For at least the reasons above, the rejection of claim 15 is not supported by the cited art and removal thereof is respectfully requested. Claims 64, 115, and 166 include limitations similar to claim 15, and so the arguments presented above apply with equal force to these claims, as well.

Regarding claim 16, contrary to the Examiner’s assertion, Dutta in view of Borella fails to teach or suggest *wherein the rendezvous nodes within the peer group are not accessible by peer nodes not in the peer group and rendezvous nodes not in the peer group*. The Examiner again refers to FIG. 5C of Dutta, but does not include any remarks indicating which, if any, of the nodes in FIG. 5C he interprets as being within a **peer group**. Furthermore, FIG. 5C does not illustrate which nodes may be included in a peer group, or whether any of the nodes not in a peer group may access a rendezvous node (or root node) within a peer group. Therefore, FIG. 5C does not teach or suggest the limitations of claim 16.

For at least the reasons above, the rejection of claim 16 is not supported by the cited art and removal thereof is respectfully requested. Claims 65, 116, 152, 167 and 199 include limitations similar to claim 16, and so the arguments presented above apply with equal force to these claims, as well.

Regarding claim 17, contrary to the Examiner’s assertion, Dutta in view of Borella fails to teach or suggest *wherein each of the one or more rendezvous nodes is*

operable to discover routes to network resources and communicate said routes to one or more of the plurality of peer nodes. The Examiner again refers to FIG. 5C of Dutta. FIG. 5c illustrates only connections between various root nodes and peer nodes. It illustrates absolutely nothing about the routes to particular resources, nor whether a rendezvous node is operable to discover such routes and communicate them to other nodes.

For at least the reasons above, the rejection of claim 17 is not supported by the cited art and removal thereof is respectfully requested. Claims 66, 89, 117, and 168 include limitations similar to claim 17, and so the arguments presented above apply with equal force to these claims, as well.

Regarding claim 18, contrary to the Examiner's assertion, Dutta in view of Borella fails to teach or suggest *wherein one or more of the plurality of peer nodes is each operable to communicate with at least one of the one or more rendezvous nodes at startup of the particular peer node to discover network resources that the particular peer node requires.* The Examiner cites paragraph [0037] as teaching this limitation. However, though paragraph [0037] describes various methods for connecting peer nodes, including using the Gnutella protocol, it describes nothing about a peer node communicating with a rendezvous node at startup to discover network resources that the peer node requires. In fact, paragraph [0037] **teaches away from** such a mechanism by describing that a peer-to-peer network is initiated when a user at a node manually enters a domain name or IP address of an application on another node that is known to support peer-to-peer networking and then the peer-to-peer application establishes a connection to the node. In other words, Dutta teaches that a peer node needing resources manually initiates a connection to a node known to include a particular application.

For at least the reasons above, the rejection of claim 18 is not supported by the cited art and removal thereof is respectfully requested. Claims 67, 118, and 169 include limitations similar to claim 18, and so the arguments presented above apply with equal force to these claims, as well.

Regarding claims 19 and 20, contrary to the Examiner's assertion, Dutta in view of Borella fails to teach or suggest *each of the plurality of peers is operable to broadcast discovery queries to discover said network resources and each of the one or more rendezvous nodes is operable to: receive one or more discovery queries for discovering said network resources, wherein the discovery queries are formatted in accordance with the discovery protocol; determine if a resource advertisement satisfying a particular one of the one or more discovery queries is cached on the particular rendezvous node; and if the resource advertisement satisfying the particular discovery query is cached on the particular rendezvous node, provide the resource advertisement to one of the plurality of peer nodes that broadcast the particular discovery query*. The Examiner cites Dutta, paragraphs [0039], [0043], and [0050] as teaching these limitations. However, paragraph [0039] describes a receiving node searching its databases, a list of files it is willing to share, or its permanent storage in its attempt to satisfy a search for content. None of these items searched is a resource advertisement cached on a rendezvous node, as recited in Applicants' claims. Paragraph [0043] describes the formatting of a query message in Gnutella and paragraph [0050] describes a browser-based search form for a search request for content, which returns the search results to the client. None of these citations describes a plurality of peer nodes operable to broadcast discovery queries (which are not the same as search requests for content), or a rendezvous node determining if a received discovery query corresponds to a cached resource advertisement and, on finding an appropriate advertisement, providing the advertisement to the node that broadcast the discovery query, as recited in Applicants' claims.

The Examiner admits that Dutta fails to teach the discovery queries are formatted in accordance with the discovery protocol and relies on Borella, column 2, lines 49-57, to teach this limitation. However, as discussed above regarding claim 1, since Dutta's method does not rely on comparing discovery queries to resource advertisements, applying a discovery protocol format to Dutta's method would still not result in the present invention, in which one or discovery queries are formatted in accordance with the peer-to-peer platform discovery protocol and if it is determined that a cached resource advertisement satisfies the discovery query, providing the advertisement to a peer node

that broadcast the discovery protocol. Furthermore, there is no suggestion in the cited art that applying the teachings of Borella to Dutta's system would result in enhanced performance, reliability or security of data transmitted over the Internet, as the Examiner contends.

For at least the reasons above, the rejection of claims 19 and 20 are not supported by the cited art and removal thereof is respectfully requested. Claims 68, 90, 91, 119, 120, 153, 170, 171, and 200 include limitations similar to claims 19 and 20, and so the arguments presented above apply with equal force to these claims, as well.

Regarding claim 21, contrary to the Examiner's assertion, Dutta in view of Borella fails to teach or suggest *each of the one or more rendezvous nodes is further operable to forward the discovery query to one or more other rendezvous nodes if the resource advertisement satisfying the discovery query is not cached on the particular rendezvous node*. The Examiner again cites paragraphs [0039] and [0050] of Dutta as teaching this limitation. However, as discussed above, these paragraphs describe searches for content, not discovery queries, and have nothing to do with rendezvous nodes or resource advertisements that may or may not satisfy such a discovery query.

For at least the reasons above, the rejection of claim 21 is not supported by the cited art and removal thereof is respectfully requested.

Many of the other dependent claims recite similar or additional limitations of a discovery query being received, responding to the discovery query if a cached resource advertisement is able to satisfy it, forwarding the discovery query if a resource advertisement satisfying the discovery query is not cached on the receiving node, etc., including claims 22, 23, 24, 25, 26, 69, 92, 96, 121, 122, 123, 124, 125, 154, 172, 173, 174, 175, and 201. For reasons similar to those presented regarding claim 21, the rejection of these claims is not supported by the cited art and removal thereof is respectfully requested.

Regarding claim 27, contrary to the Examiner's assertion, Dutta in view of Borella fails to teach or suggest *each of the one or more rendezvous nodes is further operable to forward the discovery query to one or more other rendezvous nodes if the resource advertisement satisfying the discovery query is not cached on the particular rendezvous node*. The Examiner cites Dutta, paragraph [0072] as teaching this limitation. However, this paragraph describes searches for content and caching search results, which may include an index result list and a peer-to-peer result list, containing search hit information for results found by searching the index database and the peer-to-peer network, respectively. There is nothing in this citation about rendezvous nodes forwarding discovery queries to other rendezvous nodes, or about resource advertisements that do not satisfy the discovery query, as recited in claim 27.

For at least the reasons above, the rejection of claim 27 is not supported by the cited art and removal thereof is respectfully requested. Claims 126 and 177 include limitations similar to claim 27, and so the arguments presented above apply with equal force to these claims, as well.

Regarding claims 28 and 29, contrary to the Examiner's assertion, Dutta in view of Borella fails to teach or suggest *each of the one or more rendezvous nodes is operable to: receive a discovery query for discovering a particular one of said network resources, wherein the discovery query is formatted in accordance with the discovery protocol; and propagate the discovery query to a subset of the one or more rendezvous nodes*. The Examiner cites Dutta as disclosing *each of the one or more rendezvous nodes is operable to: receive a discovery query for discovering a particular one of said network resources, and propagate the discovery query to a subset of the one or more rendezvous nodes* in paragraphs [0052, 0059, 0072, and 0073]. However, these paragraphs describe a search for content, including a search on a peer-to-peer network, returning results of the search, and caching search results (search hit information) from each source. This has nothing to do with a rendezvous node receiving a discovery query for discovering a particular network resource, propagating the discovery query to a subset of rendezvous nodes, and

those nodes propagating it to another set of rendezvous nodes, as recited in claims 28 and 29.

The Examiner admits that Dutta fails to teach the discovery queries are formatted in accordance with the discovery protocol and relies on Borella, column 2, lines 49-57, to teach this limitation. However, since Dutta's method does not rely on discovery queries for discovering particular network resources, applying a discovery protocol format to Dutta's method would still not result in the present invention, in which a rendezvous node receives discovery queries for discovering a particular one of said network resources, formatted in accordance with the peer-to-peer platform discovery protocol, and propagates them to other rendezvous nodes. Furthermore, there is no suggestion in the cited art that applying the teachings of Borella to Dutta's system would result in enhanced performance, reliability or security of data transmitted over the Internet, as the Examiner contends.

For at least the reasons above, the rejection of claims 28 and 29 is not supported by the cited art and removal thereof is respectfully requested. Claims 93, 127, 128, and 178 include limitations similar to claims 28 and 29, and so the arguments presented above apply with equal force to these claims, as well.

Regarding claim 33, contrary to the Examiner's assertion, Dutta in view of Borella fails to teach or suggest *the discovery query message comprises a security credential, wherein the rendezvous nodes are operable to use the security credential to authenticate the sending peer node*. The Examiner cites Dutta (paragraph [0055]) as teaching this limitation. However, paragraph [0055] describes only that a Web site operator might require that a registered root node be associated with a person and that a user might supply personal information. This citation has nothing to do with discovery queries or any security credentials included therein, nor with a rendezvous node authenticating a sending peer node, as recited in claim 33.

For at least the reasons above, the rejection of claim 33 is not supported by the cited art and removal thereof is respectfully requested. Claims 71, 99, 132, 182 include limitations similar to claim 33, and so the arguments presented above apply with equal force to these claims, as well.

Applicants also assert that numerous other ones of the dependent claims recite further distinctions over the cited art. However, since the rejection has been shown to be unsupported for the independent claims, a further discussion of the dependent claims is not necessary at this time.

CONCLUSION

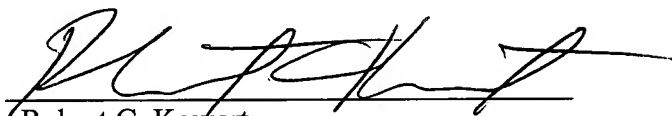
Applicants submit the application is in condition for allowance, and prompt notice to that effect is respectfully requested.

If any fees are due, the Commissioner is authorized to charge said fees to Meyertons, Hood, Kivlin, Kowert, & Goetzel, P.C. Deposit Account No. 501505/5681-07200/RCK.

Also enclosed herewith are the following items:

- ☒ Return Receipt Postcard
- ☐ Petition for Extension of Time
- ☐ Notice of Change of Address
- ☐ Other:

Respectfully submitted,



Robert C. Kowert
Reg. No. 39,255
ATTORNEY FOR APPLICANT(S)

Meyertons, Hood, Kivlin, Kowert, & Goetzel, P.C.
P.O. Box 398
Austin, TX 78767-0398
Phone: (512) 853-8850

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